

bodies, upright-scrambled bodies (whereby the limbs were in non-canonical locations) and inverted-scrambled bodies. Each stimulus had one limb highlighted, and the children were instructed to name the highlighted limb. The results indicated that the children were significantly faster at naming the highlighted body part on an upright-normal body than an inverted-normal body. However, no differences were found between the upright-scrambled and inverted-scrambled bodies. Thus, the results show an inversion effect for the normal bodies, but not the scrambled bodies. The findings suggest that preschool age children display the same pattern of configural processing for bodies found in adults.

**The effect of syntactic structure on the immediate serial recall of nonwords**

CIVIDIN, E., & ROODENRYS, S. (University of Wollongong)

lizc@uow.edu.au

The aim of the present research was to determine the effect that adding syntactic structure to a list of nonwords has on their immediate serial recall. Experiment one revealed superior recall for nonword lists containing three English suffixes in a syntactic order compared to matched lists in which the same suffixes occurred in a scrambled order. However, both syntactic and scrambled lists were less well recalled than the control nonword lists in which no suffixes were added, suggesting an interaction between the facilitative effect of syntactic structure and the detrimental effect of increased list length resulting from suffix additions. Experiment two also revealed a facilitative syntactic effect, using lists of matched length and a combination of both English suffixes and function words. These findings contradict traditional sentence memory research, which assumed only an implicit role for syntactic structure, yet are consistent with numerous studies in the verbal learning paradigm, and with the newly emerged psycholinguistic approach to short-term memory.

**Relating measured and perceived similarity of three-dimension face shape to memorability**

CLAES, P., CLEMENT, JG. (University of Melbourne), MIASAKA, S., YOSHINO, M. (National Research Institute of Police Science, Japan), NGUYEN, S., & HILL, H. (University of Wollongong),

harry@uow.edu.au

Perceived and measured similarity provide a way to relate human perception to measured physical differences, and to link both to Psychologically relevant attributes such as memorability and confusability. This work extends previous research using image based measures to case of underlying three-dimensional (3D) face shape. 3D shape has the advantage of being a property of the face not the image. Two groups of nine naive observers were asked to sort animation of twenty randomly generated 3D faces into an unspecified number of groups on the basis of perceived similarity. Co-occurrence of faces in these groups was then converted into a measure of perceived similarity. The correlation with physical measures will be reported. After the sorting task, observers were also given a surprise old/new recognition task based on the twenty faces they had sorted and an additional twenty faces generated in the same manner. New and Old faces were counterbalanced across the two groups of observers. Hits and false alarms identify both memorable faces and faces that can be reliably rejected as not having been seen before. Again, these can be linked to physical and psychological similarity.

**The phonological neighbourhood effect on short-term memory for order**

CLARKSON, L., & ROODENRYS, S. (University of Wollongong)

lc62@uow.edu.au

A phonological neighbourhood is a group of words that differ from a target word by a single phoneme. The likelihood that a word will be recalled from short-term memory is influenced by how many phonological neighbours it has. Words with many phonological neighbours are more likely to be recalled than words with few phonological neighbours. There may also be an effect on memory for the order of sequences, with better order memory for lists of large neighbourhood words than for small neighbourhood words. However this effect is usually assessed using serial recall, which confounds item and order memory. To examine the effect on memory for order, the current experiment used a serial reconstruction task. Reconstruction places less emphasis on item recall and is considered a more process pure assessment of memory for order. Results show an effect of phonological neighbourhood size on memory for order with better performance for lists of large phonological neighbourhood words than for lists of small phonological neighbourhood words. These results challenge models of short-term memory for order that posit a late stage reintegration process, and instead are suggestive of a link between long-term memory and short-term memory occurring during the rehearsal process.